

# RANGELAND GRASSHOPPER SUPPRESSION PROGRAM -- IDAHO 2003

## SUMMARY OF SURVEY RESULTS

### GRASSHOPPERS

With a few exceptions, most areas of Idaho did not have heavy grasshopper infestations in 2003. An outbreak was detected in the area south of the Snake River along the Twin Falls, Elmore, and Owyhee County boundaries. There were also significant infestations near Richfield in Lincoln County, around Oakley, Elba and Almo in Cassia County, and around Arco in Butte County. Species composition consisted primarily of *Aulocara ellioti*, *Oedaleontus enigma*, *Camnula pellucida*, and *Melanoplus sanguinipes*. The season should have allowed exceptional oviposition opportunities and there are currently no factors that would indicate any reason to expect major decreases in overall grasshopper populations in 2004.

SIGNIFICANT 2003 RANGELAND GRASSHOPPER SURVEY RESULTS				
County	Acres infested at more than 8 grasshoppers per sq. yd.			
	BLM	National Forest	State Land	Private Lands
Ada	1,000			2,000
Adams	1,000			1,000
Bannock				1,000
Bear Lake				1,000
Bingham	500			
Blaine	2,000			1,000
Boise				500
Bonneville				1,000
Butte	1,000			1,000
Camas	4,000			6,000
Canyon	500			
Caribou				1,000
Cassia	5,000	2,000		4,000
Custer		500		
Elmore	50,000			2,000
Fremont	1,000	1,000		1,000
Gem	5,000			2,000
Gooding	5,000			4,000
Jerome	5,000			3,000
Lincoln	50,000			2,000
Minidoka	60,000		1,000	2,000
Oneida	5,000	5,000		2,000
Owyhee	40,000		1,000	3,000
Payette	1,000			1,000
Power	1,000			
Teton		500		
Twin Falls	5,000			2,000
Valley		1,000		1,000
Washington	5,000			5,000
Total	248,000	10,000	2,000	49,500
Grand total				309,500

## MORMON CRICKETS

The Mormon cricket outbreak which has been building in the Mayfield area of Elmore County increased in density and extent in 2003. Extremely high population levels, exceeding 2,500 per sq. yd. in the early spring, were present throughout the Boise and Danskin Fronts in Elmore, Ada, Gem and Boise Counties. This infestation extends approximately 80 miles from Emmett to King Hill. There is also an infestation of Mormon crickets on the northern foothills of the Owyhee Mountains in Owyhee County and an infestation in Oneida County around Malad City. Infestations are starting to build in Washington and Valley Counties. The season should have allowed exceptional oviposition opportunities and there are currently no factors that would indicate any major decrease in overall Mormon cricket populations in 2004. We anticipate the large infestation in Elmore, Ada, Gem and Boise Counties has not yet reached its peak, although treatments in Elmore County may have reduced local elements of the outbreak. Rangelands very near Boise could host high population densities in 2004.

SIGNIFICANT 2003 MORMON CRICKET SURVEY RESULTS				
County	Acres infested at more than 3 Mormon crickets per sq. yd.			
	BLM	National Forest	State Lands	Private Lands
Ada	10,000		4,000	60,000
Bannock				1,000
Bingham				500
Boise	3,000	6,000	1,000	25,000
Camas		1,000		
Elmore	25,000	60,000	7,000	60,000
Gem	6,000			5,000
Gooding	6,000		1,000	
Oneida	4,000	3,000		2,000
Owyhee	18,000		1,000	1,000
Valley		15,000		
Washington	10,000			5,000
Total	82,000	85,000	14,000	159,500
Grand total				340,500

## SUMMARY OF COMPLAINTS AND TREATMENTS

Many members of the public, especially along the Boise and Danskin Fronts in Ada, Elmore, and Boise Counties voiced general complaints about Mormon crickets throughout the spring and summer. There were also scattered complaints about grasshoppers and Mormon crickets from southeastern Idaho. Most of these complaints did not lead to official requests for treatment from federal land management agencies.

**USDA APHIS Plant Protection and Quarantine (PPQ)** received a total of 59 official complaints about grasshoppers and Mormon crickets. We conducted ten treatment projects on federal land in response to these complaints. All these treatments were on lands managed by Bureau of Land Management and consisted of application of 10 lbs/acre of 5% carbaryl bait. The bait was distributed by ground along roads and trails through infested rangelands in Elmore, Owyhee, and Twin Falls Counties and by air on infested rangelands in Elmore, Boise, Cassia, Twin Falls, and Minidoka Counties. In no cases were strips more than 100 feet wide treated without intervening untreated spaces. Distance between swaths of aerially applied bait ranged from 200 to 1000 feet. Treated acres totaled 300 in Boise County, 3,010 in Cassia County, 13,010 in Elmore County, 5,000 in Minidoka County, 275 in Owyhee County, and 2,855 in Twin Falls County.

We also conducted experimental treatments on 840 acres of State of Idaho Land in Elmore County with an application rate of 5 lbs/acre of 5% carbaryl bait applied in a crisscross pattern with 1,320 feet between swaths. PPQ treated a total of 25,290 acres with 248,700 lbs of carbaryl 5% bait in Idaho in 2003.

The other official complaints did not result in treatment by PPQ because:

Insects were on private land and not on federal land or  
Numbers of insects present did not justify treatment

**Idaho State Department of Agriculture (ISDA)** participated in cost-share treatment projects with private land managers and county agricultural agents to treat range and croplands in southern Idaho. These projects included:

- 70 acres near Horseshoe bend in Boise County with 5% carbaryl bait.
- 1,247 acres north of Mountain Home in Elmore County with diflubenzuron.
- 746 acres near Hammett in Elmore County with malathion
- 25,431 acres around Shoshone, Richfield and Dietrich in Lincoln County with diflubenzuron
- 13,174 acres north of Arco in Butte County with diflubenzuron
- 4,338 acres around Almo in Cassia County with diflubenzuron
- 19,845 acres south of Malad City in Oneida County with diflubenzuron
- 2,000 acres near Grays Lake in Caribou County with malathion

**Total ISDA Treated Acres – 66,851**

Some treatments included utilization of diflubenzuron on grain and hay crops under special needs registration from Environmental Protection Agency.

ISDA provided 5% carbaryl bait to agricultural landowners for application to their own land. Amounts distributed (in pounds of 5% bait) were:

Ada County	11,700
Bear Lake County	1,848
Blaine County	3,500
Boise County	5,296
Butte County	7,750
Camas County	2,000
Cassia County	2,050
Custer County	50
Elmore County	121,300
Franklin County	4,674
Gem County	1,532
Lincoln County	14,000
Minidoka County	200
Oneida County	11,050
Owyhee County	9,070
Power County	6,000
Twin Falls County	3,000
Valley County	950
Washington County	2,050
<b>Total</b>	<b>208,020</b>

## **NEW ENVIRONMENTAL DOCUMENTATION**

As provided by recently concluded Memoranda with Bureau of Land Management and U.S. Forest Service, PPQ prepared the environmental documentation required for the Rangeland Grasshopper Suppression Program. The Environmental Assessment which informed decisions about the 2003 program in Idaho is available at:

<http://www.agri.state.id.us/PDF/Plants/Environmental%20Assessment%20-%20EA-ID-PPQ-GH2003-001.pdf>

The Environmental Impact Statement which informs decisions on the Rangeland Grasshopper Suppression in seventeen western states is available at:

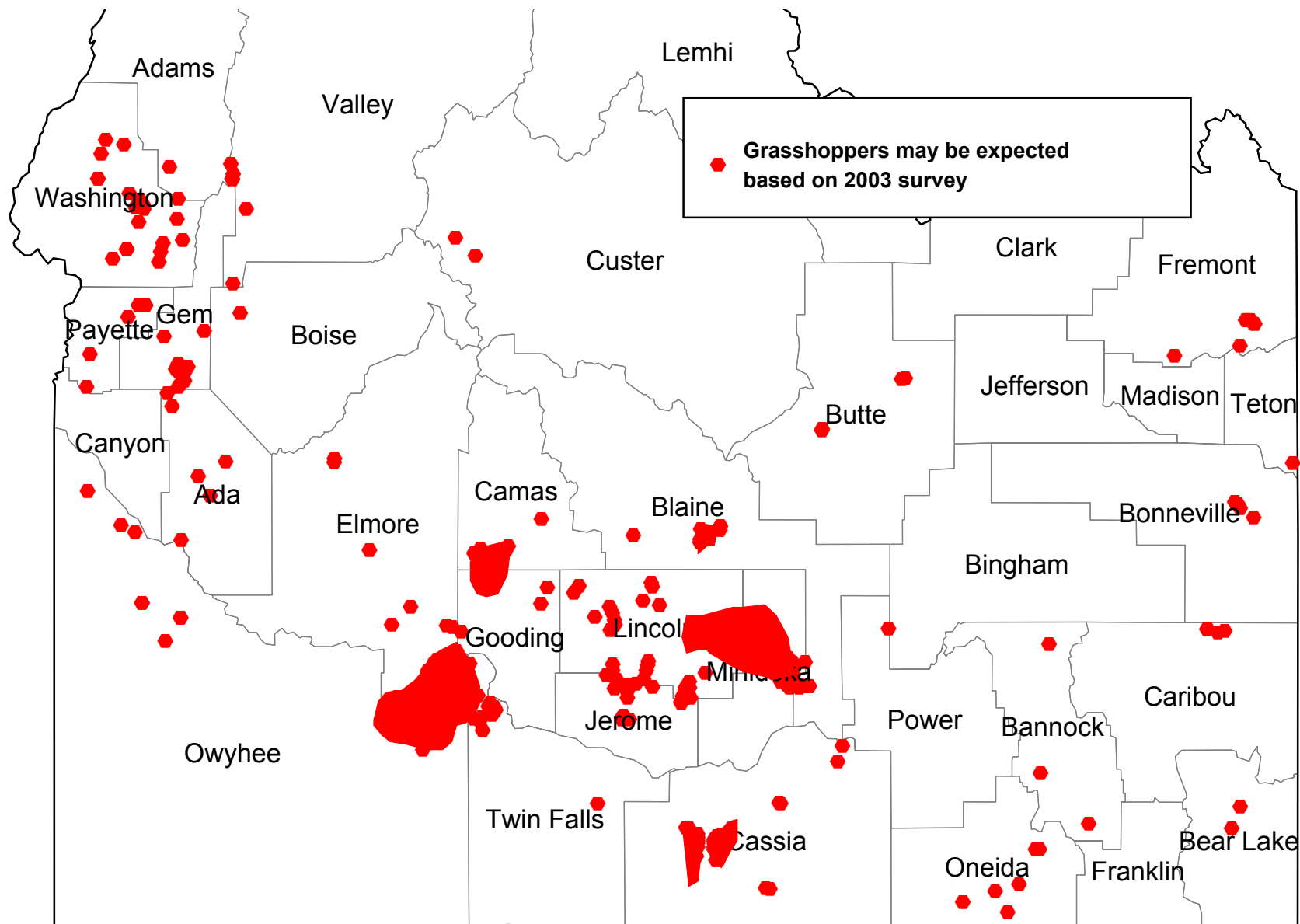
<http://www.aphis.usda.gov/ppd/es/gh.html>

## **LAWSUIT**

During the review period of the Environmental Assessment, four organizations served PPQ with a Notice of Intent to sue for alleged violation of the Clean Water Act. Suit was not filed on those grounds. However, the four organizations did file suit for alleged violations of National Environmental Policy Act, Administrative Procedures Act, National Forest Management Act, and Federal Land Policy and Management Act, under the provisions of Declaratory Judgment Act, and Equal Access to Justice Act. The case was settled out of court. Documents filed in the case are available at:

[http://www.id.uscourts.gov/ECM/dc\\_images/\\_12T0SXBMP10139254.pdf](http://www.id.uscourts.gov/ECM/dc_images/_12T0SXBMP10139254.pdf)

# Idaho 2004 grasshopper outlook



# Idaho 2004 Mormon cricket outlook

